



# Oregon Main Street Conference 2015 • The Dalles

Michael Houser • DAHP

Nicholas Vann • DAHP





# ANATOMY OF A **MAIN STREET BUILDING**



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# ANATOMY OF A MAIN STREET BUILDING

Terry Building; Port Townsend

**Cornice**  
The projecting elements at the top of the exterior wall.

**Upper Floor(s)**  
The non-retail volume above the ground floor.

**Storefront**  
The front exterior wall of a commercial space, typically with large area of glass.

**Pilaster**  
An attached rectangular column.

**Bulkhead**  
The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

**Display Window**  
The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

**Bracket**  
A support for a projection, typically constructed of wood, press metal or cast stone.

**Window Hood**  
A projecting member above a window that is both structural and decorative; typically made of stone, metal or wood.

**Sash**  
Operable frame filled with glass.

**Sill**  
Horizontal member immediately below the window assembly.

**Lintel**  
Structural member above a storefront that support the upper wall.

**Transom**  
Upper windows of a storefront; can be operable or fixed, clear or divided.



# ANATOMY OF A MAIN STREET BUILDING

Stoller Building; Camas



## Window Pattern(s)

Rhythm or grouping of windows (ie A, B, B, pattern)

## Cornice

The projecting elements at the top of the exterior wall.

## Upper Floor(s)

The non-retail volume above the ground floor.

## Storefront

The front exterior wall of a commercial space, typically with large area of glass.

## Pilaster

An attached rectangular column.

## Bulkhead

The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

## Display Window

The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

## Coping

Water resistant covering of the top of a wall.

## String Course

A projecting member that is both structural and decorative; typically made of stone, metal or wood.

## Sash

Operable frame filled with glass.

## Sill

Horizontal member immediately below the window assembly.

## Lintel

Structural member above a storefront that support the upper wall.

## Transom

Upper windows of a storefront; can be operable or fixed, clear or divided.

# ANATOMY OF A MAIN STREET BUILDING

Baker – Boyer National Bank Building; Walla Walla

**Cornice**  
The projecting elements at the top of the exterior wall.

**Upper Floor(s)**  
The non-retail volume above the ground floor.

**Storefront**  
The front exterior wall of a commercial space, typically with large area of glass.

**Pilaster(s)**  
An attached rectangular column.



**Bulkhead**  
The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

**Display Window**  
The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

**Transom**  
Upper windows of a storefront; can be operable or fixed, clear or divided.

**Modillions**  
A series of scroll-shaped brackets supporting the corona of a cornice.

**String Course**  
A projecting member that is both structural and decorative; typically made of stone, metal or wood.

**Bay(s)**  
Grouping of windows (example has four bays).

**Mullion**  
A vertical member separating windows, or panels set in a series.

**Capitol**  
Top portion of a column or pilaster crowing the shaft

# ANATOMY OF A MAIN STREET BUILDING

McGregor's Store; Hooper



## Cornice

The projecting elements at the top of the exterior wall.

## Storefront

The front exterior wall of a commercial space, typically with large area of glass.

## Recessed Entry

An entrance door which is set back from the main façade of the building.

## Bulkhead

The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

## Display Window

The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

## Parapet

A low, solid, protective wall at the edge of a roof.

## String Course

A projecting member above a window that is both structural and decorative; typically made of stone, metal or wood.

## Exterior Finish

Exterior surfacing material.

## Pilaster

An attached rectangular column.

## Transom

Upper windows of a storefront; can be operable or fixed, clear or divided.

# ANATOMY OF A MAIN STREET BUILDING

Bank of Starbuck; Starbuck



## Cornice

The projecting elements at the top of the exterior wall.

## Storefront

The front exterior wall of a commercial space, typically with large area of glass.

## Pilaster

An attached rectangular column.

## Bulkhead

The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

## Display Window

The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

## Bracket

A support for a projection, typically shaped link and inverted "L".

## String Course

A projecting member above a window that is both structural and decorative; typically made of stone, metal or wood.

## Sash

Operable frame filled with glass.

## Sill

Horizontal member immediately below the window assembly.

## Transom

Upper windows of a storefront; can be operable or fixed, clear or divided.

# ANATOMY OF A MAIN STREET BUILDING

Pay n' Takit Store; Spokane



## Cornice

The projecting elements at the top of the exterior wall.

## Storefront

The front exterior wall of a commercial space, typically with large area of glass.

## Bulkhead

The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

## Corner Entry

Double entry at chamfered corner of building.

## Display Window

The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

## Parapet

A low, solid, protective wall used to obscure a low-pitched roof.

## Spandrel Panel

A section of wall, defined as an ornamental panel, typically between two vertical windows or arches.

## Awning

Fabric or rigid metal projection offering protection from the weather.

## Transom

Upper windows of a storefront; can be operable or fixed, clear or divided.

# ANATOMY OF A MAIN STREET BUILDING

J.C. Penny Store; Puyallup



## Cornice

The projecting elements at the top of the exterior wall.

## Storefront

The front exterior wall of a commercial space, typically with large area of glass.

## Bulkhead

The area between the sidewalk and the display windows: can be of wood, tile, or metal, or can be glazed.

## Display Window

The main areas of clear glass on a storefront behind which goods are arranged. Usually of polished plate glass.

## Recessed Entry

An attached rectangular column.

## Transom

Upper windows of a storefront; can be operable or fixed, clear or divided.

## Parapet

A low, solid, protective wall used to obscure a low-pitched roof.

## Awning

Structural member above a storefront that support the upper wall.



**7 DEADLY SINS  
OF  
PRESERVATION**

# **SIN #1**

**THOU SHALT  
NOT STEAL FROM  
OTHERS**



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# BUILDING DETAILS



# COMMERCIAL — Exterior Material



Carrera Glass



Poured Concrete



Marblecrete



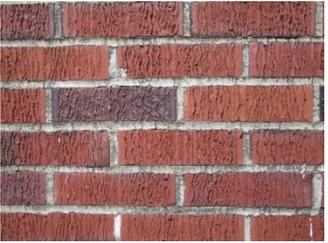
Concrete Block



Pressed Tin



Enameled Metal



Brick



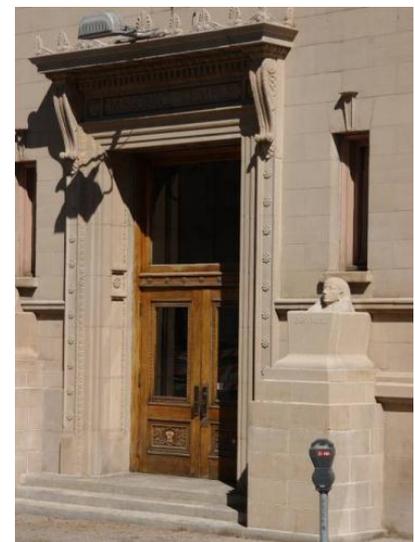
# COMMERCIAL — Storefronts



# COMMERCIAL – Cornice



# COMMERCIAL — Doors



# COMMERCIAL — Signage



# COMMERCIAL — Awnings





**7 DEADLY SINS  
OF  
PRESERVATION**

# **SIN #2**

**THOU SHALT NOT INSTALL  
THY VINYL SIDING  
OR CEMENTITIOUS FIBER  
CEMENT BOARD PRODUCTS**



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**7 DEADLY SINS  
OF  
PRESERVATION**

# “LEAKY” WINDOWS?



# SIN #3

**THOU SHALT  
NOT INSTALL  
VINYL WINDOWS**

(in most cases – it depends on the situation!)



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# LEAKY WINDOWS: SOLUTION

- **Storm windows!** Interior works best in our climate. **Weatherstripping** helps, too.
- Don't blame the windows for air infiltration or leaking – most warm air will escape through the attic. Cold air enters through crawl spaces.
- Insulate attic and crawl spaces first! Then insulate around plumbing, electrical outlets, dryer vents, etc. Then maybe the walls. Then your neighbor's non-historic house. Then maybe your windows could be replaced in-kind. Maybe. But probably not.
- R-values.... (higher = better)
  - Single pane window: 1.0
  - Double pane replacement: 2.0
  - **Single pane w/ storm: 2.0**



# Commercial Building Types



# TYPE vs. STYLE

- *TYPE* is the most basic arrangement of the building's layout, in the floor plan and massing of structural components.
- The building's *STYLE* is determined by the architectural and ornamental details applied to the basic structure.



# COMMERCIAL — One Part Block



Medical Lake



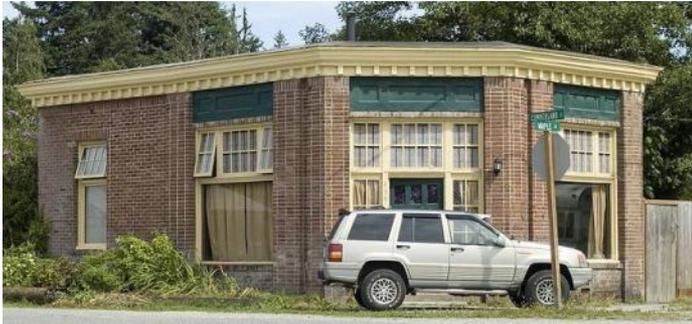
Hooper



Snohomish



Walla Walla



Hamilton



Connell



Olympia



Norland



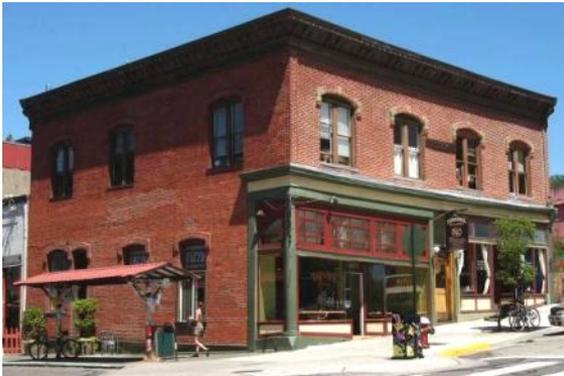
Shelton



# COMMERCIAL — Two Part Block



Colfax



Bellingham



Ellensburg



Port Townsend



# COMMERCIAL — Two Part Block



Olympia



Shelton



Vancouver



Bremerton



Longview



# COMMERCIAL — One Part Vertical Block



Yakima



Centralia



Walla Walla



Tacoma



# COMMERCIAL — One-Part Vertical Block



Kahlotus



Wenatchee



Federal Way



Yakima



Seattle



# COMMERCIAL — Enframed Window Wall



Vancouver



Spokane



Richland



Centralia



Olympia



# COMMERCIAL — Stacked Vertical Block



Port Townsend



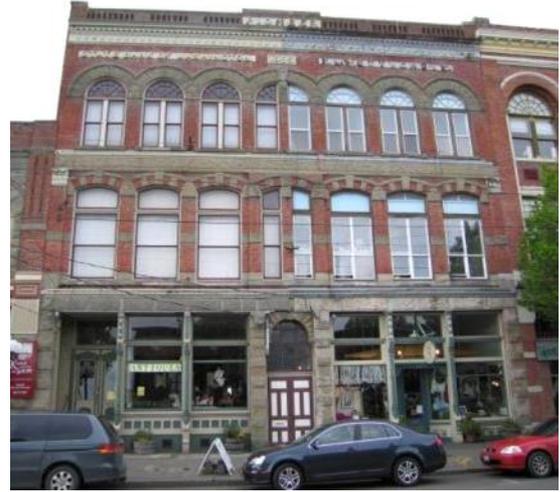
Seattle



Walla Walla



Seattle



Port Townsend

# COMMERCIAL — Two Part Vertical Block



Spokane



Spokane



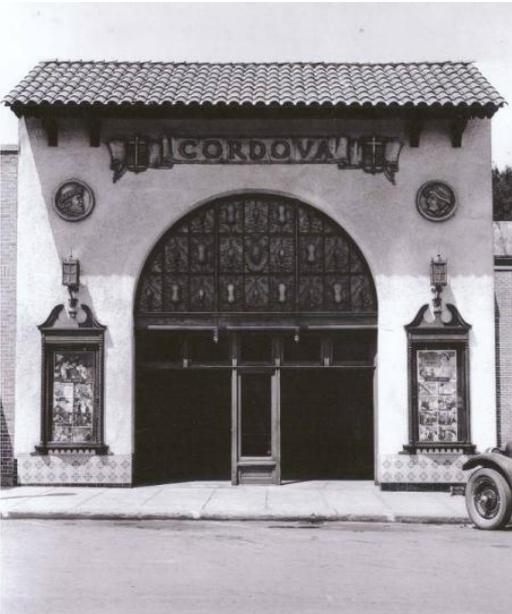
Seattle



Olympia



# COMMERCIAL — Vault



Pullman



Walla Walla



Walla Walla



Waitsburg



Snohomish



Centralia



# COMMERCIAL — Three Part Vertical Block



Walla Walla



Seattle



Port Angeles



Vancouver



# COMMERCIAL — Temple Front



Snohomish



Elma



Seattle



Ephrata



Vancouver



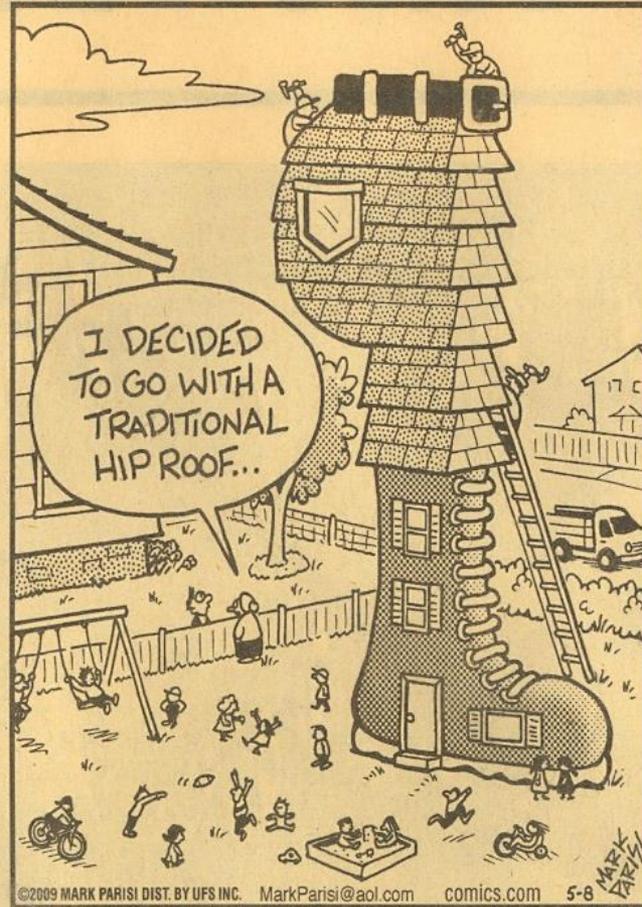
Colville

# FAN MAIL



OFF THE MARK

By Mark Parisi







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**STARTS TODAY (March 18th)**  
**WOOLWORTH'S**  
**GRAND OPENING**  
**SALE**

**SELF SERVICE**  
 Buy what you want, when you want, at your own pace. No waiting in line. No fussing over clerks. No "I'm out of stock" signs. No "I'm out of stock" signs. No "I'm out of stock" signs.

**CONTINUES THROUGH FRIDAY & SATURDAY**

**SEE THESE SUPER SPECIALS!**

Sheer Nylon	2-98
Ladies' Briefs	4-98
Bath Towel	67
Pillow Case	39

**DON'T MISS THESE BIG VALUES!**

FREE	FREE	FREE
1000 Count Handkerchiefs - 1000	1000 Count Handkerchiefs - 1000	1000 Count Handkerchiefs - 1000
1000 Count Handkerchiefs - 1000	1000 Count Handkerchiefs - 1000	1000 Count Handkerchiefs - 1000

**CANDY DEPT. SPECIALS!**

WIPED CHOCOLATE	39
WIPED CHOCOLATE	2-77
WIPED CHOCOLATE	2-77

**SHOP WOOLWORTH'S FIRST FOR EVERYTHING!**  
 Store Hours - 9:00 to 5:00. Grand Opening Daily 9:00 to 5:00.  
**F. W. WOOLWORTH CO.**  
 Third Floor - 8th & Williams



BENTON'S new Woolworth Store will be officially unveiled today when doors are opened to the public at 9:00 a.m. Here is an exciting view of the modernized two-story structure at the corner of Third and Williams street. The store embodies all the latest innovations in merchandising and will operate as a self-service unit with clerks on hand to assist those requiring personal service. Management of the firm is offering special bargains throughout the weekend to commemorate the opening and the diamond jubilee of the vast Woolworth organization. —Marier Studio Photo





Tijuana, Mexico



Oxnard, CA

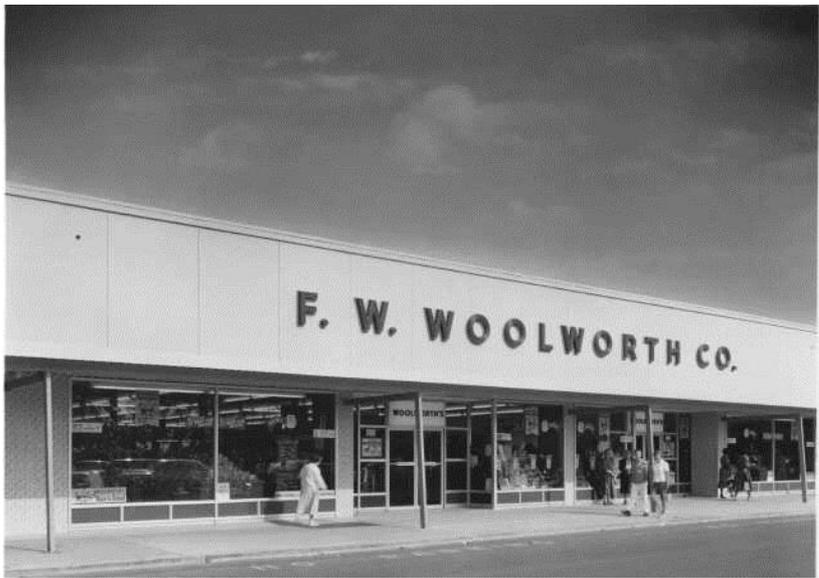


San Diego, CA



Clarksdale, MS





Lakewood - 1957



Tacoma - 1950

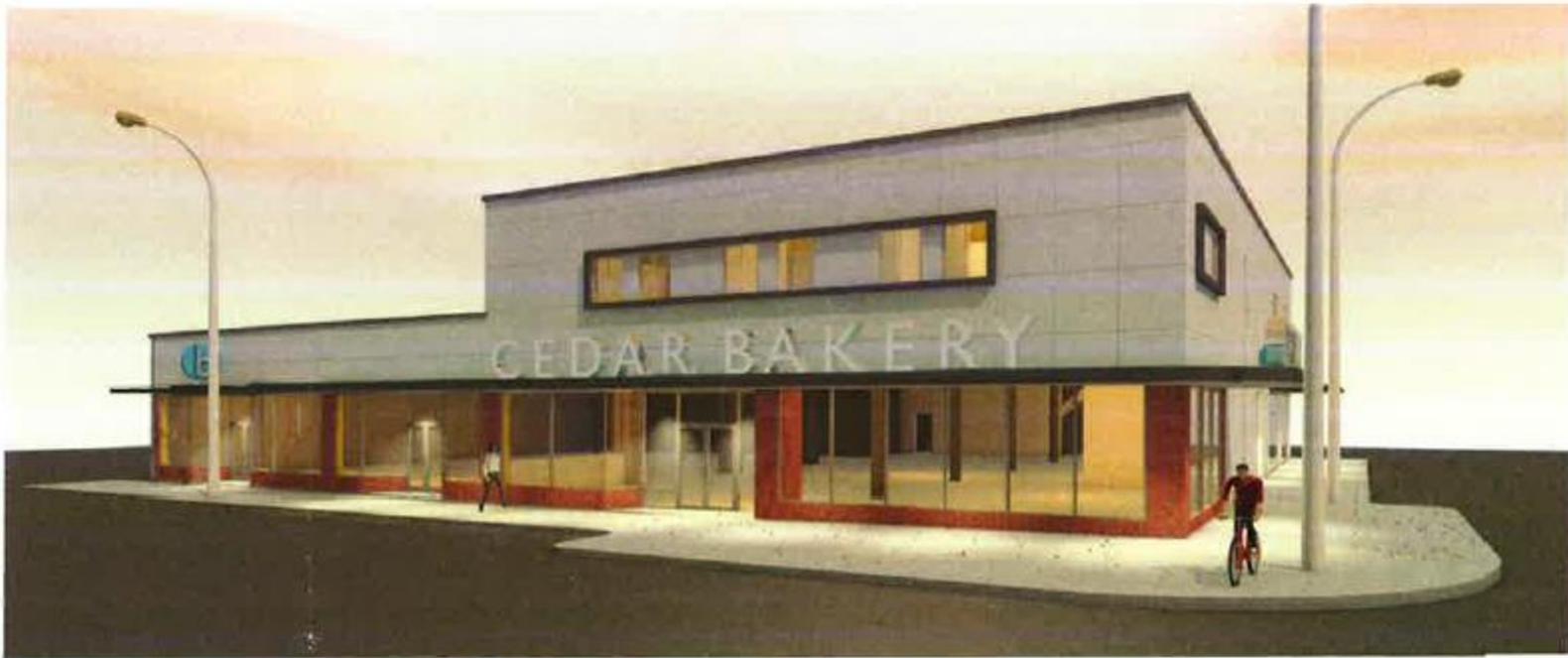


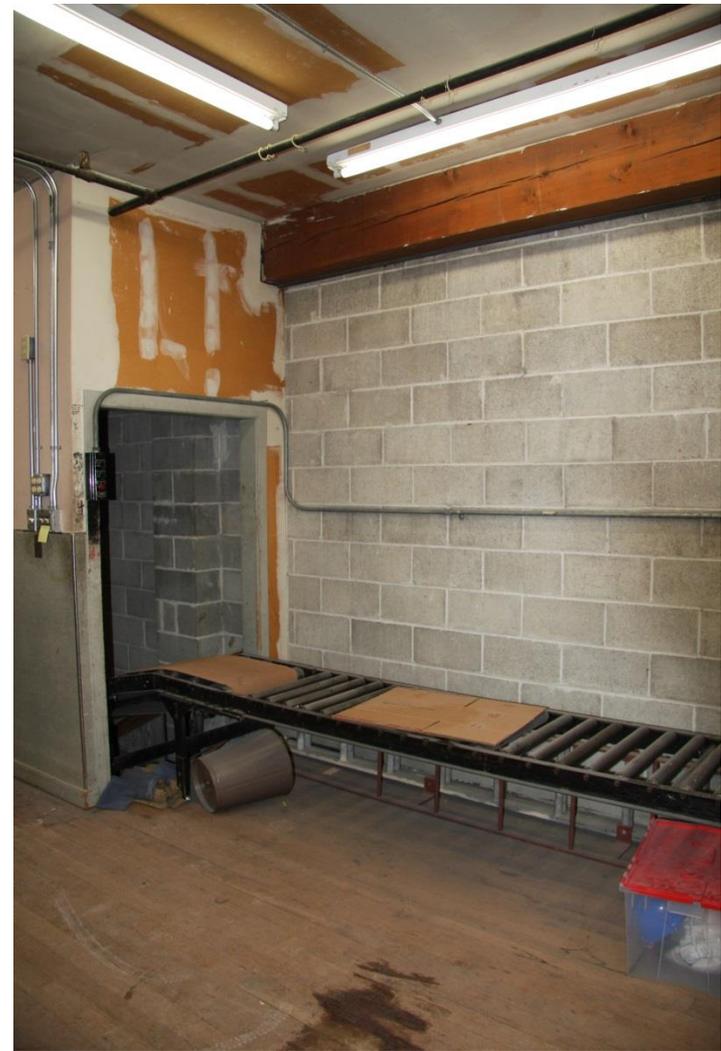
Bellingham - 1959



Longview - 1949

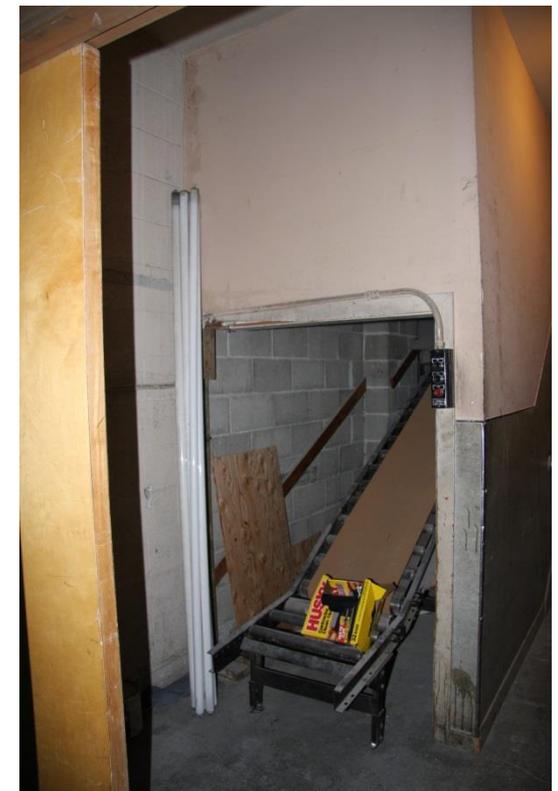






Second Floor





## First Floor



# Eligible Building?







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**7 DEADLY SINS  
OF  
PRESERVATION**

# **SIN #4**

**THOU SHALT NOT INJURE THY  
BUILDING BY ABRASIVE CLEANING  
METHODS OR WEIRD ADDITIONS AND  
ALTERATIONS UNLESS OTHERWISE  
VERIFIED BY A TECHNICAL EXPERT  
TO NOT BE HARMFUL TO HISTORIC  
FABRIC OR DETER OR OBSCURE FROM  
SAID FABRIC**

# **SIN #4**

**THOU SHALT NOT  
INJURE THY  
BUILDING**

# OUCH, THAT HURTS!



sandblasting



rotor / machining



walnut blasting



# ABRASIVE CLEANING METHODS

- Test cleaning solutions on a small, unobtrusive area first
- Don't use heavy chemical cleaners or masonry sealers
- Don't sandblast, machine grind, or pressure wash (>200psi)
- **Preservation Brief 6: The Dangers of Abrasive Cleaning Methods**



# UGLY BUILDING SYNDROME (UBS)



# UGLY BUILDING SYNDROME (UBS): SOLUTION

- **DESIGN is PROBLEM SOLVING**
- Proceeding without a plan is like going on a trip without directions; you may get there, but how do you know where you are?
- Hire an Architect!
- Consult with Main Street Design Committee or local Historic Preservation Commission during early project development phases
- Consult with SHPO
- Community Design Charrette?





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# Alterations: **COMPATIBLE**



before

after



# Alterations: **COMPATIBLE**



before



after

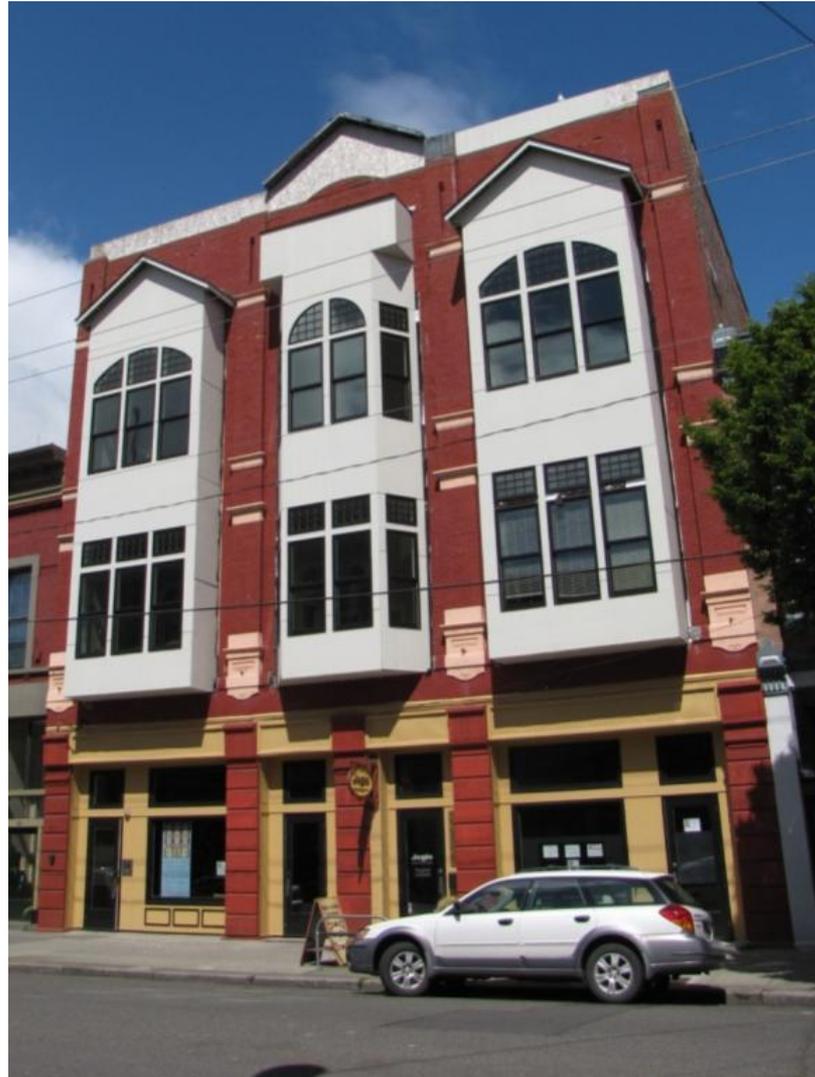
# Alterations: **NOT COMPATIBLE**



- Non-compatible materials
  - Vinyl windows
  - Vinyl siding
  - EIFS
  - Previously non-present
- False history
- Out of scale or proportion
- Poor craftsmanship
- Inappropriate window divisions
- Abrasive cleaning or repair methods
  - Portland cement-based mortar
  - Sandblasting
  - Chemical cleaners



# Appropriate Rehab?





# Alterations: **NOT COMPATIBLE**

parapet extension alters proportion and scale

Architectural features not period appropriate





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# Appropriate Rehab?





# Alterations: **NOT COMPATIBLE**



# STUMP the CHUMP

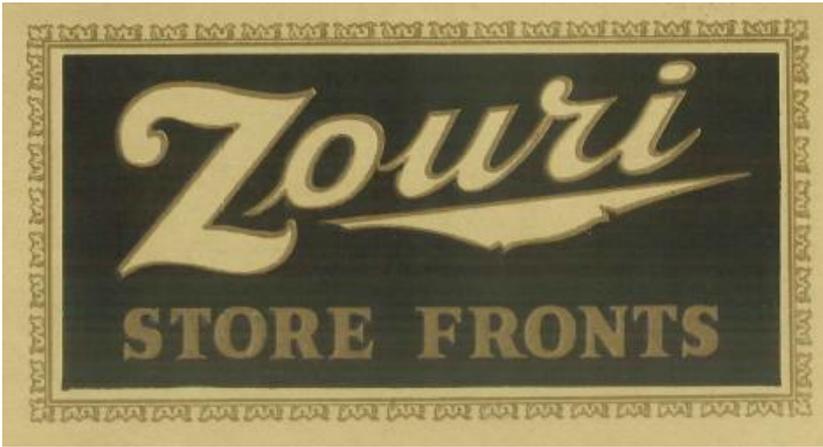


What is the name of the famous Washington State architect who designed The Dalles High School in 1941?



What is the name of the company who invented the modern storefront system?





**ZOURI**  
**SAFETY KEY-SET**  
*and*  
**INTERNATIONAL**  
STORE FRONT CONSTRUCTION

*All Zouri Safety Key-Set Sash and Bars Carry the Underwriters' Laboratories Inspection Stamp*

Catalog No. 12

**Zouri Drawn Metals Company**  
FACTORY AND GENERAL OFFICES  
1608 East End Avenue, Chicago Heights, Illinois  
*Represented in Principal Cities in United States and Canada*

LISTED BY THE UNDERWRITERS LABORATORIES

**Zouri Store Front No. 1**

An old type of store front. It does not afford a large display space unless the entrance is made wider and considerably deeper. This style, however, is suitable where displays of individual articles are not so important as the general attractiveness of the entire front. It will do for a front from 18 to 25 feet wide.

Page Number

**ZOURI KEY-SET STORE FRONT CONSTRUCTION**

Key for Setting All Zouri Safety Key-Set Sash

*Full Size Perspective*

**Zouri Safety Key-Set Sash No. 115 with Sill Covering No. 700**

*Approved by Underwriters' Laboratories*

Zouri, No. 111 Self-Adjusting Setting Blocks are furnished with Safety Key-Set Sash without charge.

No. 500. Transom Bar Undercutting over entrance with Zouri Safety Key-Set Sash No. 115 and Transom Bar No. 416.

*One-half actual size*

No. 505. Vesibule Head Jamb with No. 105 Zouri Safety Key-Set Sash.

*One-half actual size*

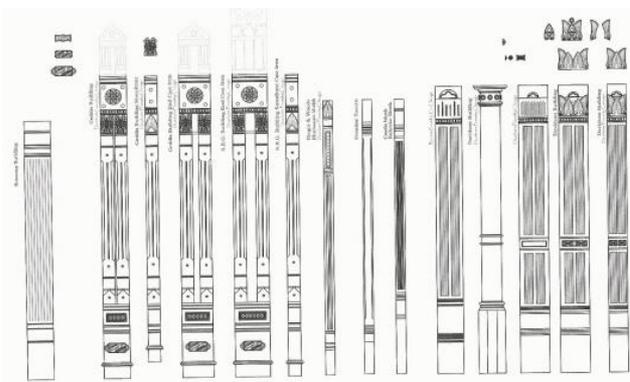
Face Edge



Who's logo is this?



Name at least two manufactures of cast iron storefront systems?



- **Walla Walla Foundry** - Walla Walla
- **Olympia Foundry Co.** - Olympia
- **Colfax Foundry** - Colfax
- **Washington Iron Works** - Seattle
- **Puget Sound Dry Dock Co.** - Seattle
- **Variety Iron Works** - Seattle
- **Vulcan Iron Works** - Seattle
- **Cherry & Parkes** - Tacoma
- **Standard Iron Works** - Tacoma
- **Ellensburgh Foundry Co.** - Ellensburg
- **Union Iron Works** - Spokane
- **National Iron Works** - Spokane
- **P.T. Foundry & Machine Co.** - Port Townsend
- **Willamette Iron Works** - Portland, OR
- **Smith Bros & Watson Iron Works** - Portland, OR
- **Scow Bay Foundry** - Astoria, OR
- **Coeur D' Alene Wallace Iron Works** - Coeur D' Alene, ID
- **Mesker Bros.** - St. Louis, Missouri
- **Geo L. Mesker & Co.** - Evansville, Indiana
- **Koken Iron Works** - St. Louis, Missouri
- **Dearborn Foundry Co.** - Chicago, IL





**PUGET SOUND METAL CORNICE WORKS.**  
W. G. WARREN, Prop.  
MANUFACTURERS OF COPPER AND GALVANIZED IRON  
**CORNICE AND FRONTS,**  
Tin, Copper, Corrugated Iron and Composition  
**ROOFING.**  
Warren's Improved Skylights.  
— ALSO —  
Manufacturers of Metal Shingles.  
All Work Guaranteed and orders taken from any part of the United States or Elsewhere. Correspondence Solicited.  
Office and Shops, 1717 S. Tacoma Ave., TACOMA, WASH.



When did Texture-One-Eleven (T1-11) siding become available for purchase?

- a) 1964
- b) 1954
- c) 1974
- d) 1962





Who's downtown boasts this giant rabbit?





Linda Faulkner



“Giant Men”  
International Fiberglass, Venice, CA  
1962-1972



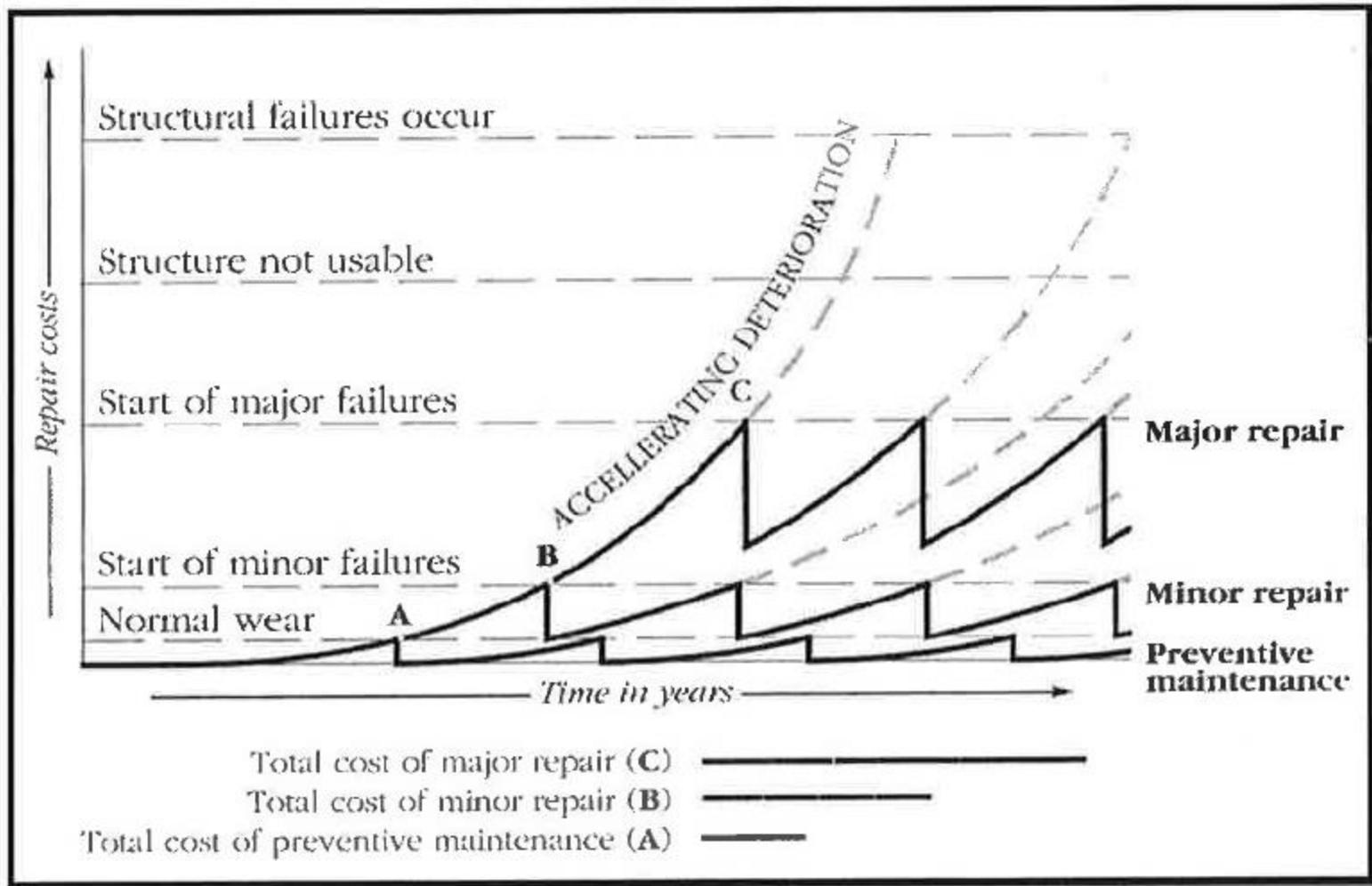


**7 DEADLY SINS  
OF  
PRESERVATION**

# **SIN #5**

**THOU SHALT NOT  
DEFER THY BUILDING  
MAINTENANCE**

# ACTIVE MAINTENANCE vs. DEFERRED MAINTENANCE



# MOISTURE INTRUSION



sandstone



brick



elastomeric paint

# MOISTURE INTRUSION



plaster / roof



wall insulation



paint failure

# MOISTURE INTRUSION

- Proactive maintenance
- Stabilize the roof or foundation first; identify the root of the problem
- Insulation may be causing the problem
- Don't use Portland Cement-based mortar mixes if your building dates pre-1930s
- Repair or replace?



# MOISTURE INTRUSION

- **Preservation Brief 18:**  
Identifying character defining features
- **Preservation Brief 21:**  
Repairing Flat Plaster
- **Preservation Brief 39:**  
Controlling Unwanted Moisture
- [www.nps.gov/tps](http://www.nps.gov/tps)



# PAINT FAILURE



flaking / peeling



crazing



spalling



# PAINT FAILURE

- Clean the substrate
- Hand scrapers – don't be abrasive!
- Test cleaning solutions on a small, unobtrusive area first
- Use correct paint type
  - Latex, elastomeric
  - Oil / alkyd based
- **Preservation Brief 10: Exterior Paint Problems**





**7 DEADLY SINS  
OF  
PRESERVATION**

# **SIN #6**

**THOU SHALT NOT  
SPECIFY IMPROPER  
MORTAR MIXES**

# IMPROPER MORTAR MIX?



# MORTAR MIX: SOLUTION

- Proactive maintenance
- Keep exterior surfaces clean
- Don't use Portland Cement-based mortar mixes if your building dates pre-1930s
- **Preservation Brief 2: Repointing Mortar Joints in Historic Masonry Buildings**
- Weep holes help your building breathe! (If you don't have a URM).
- When in doubt, send mortar sample to a lab.





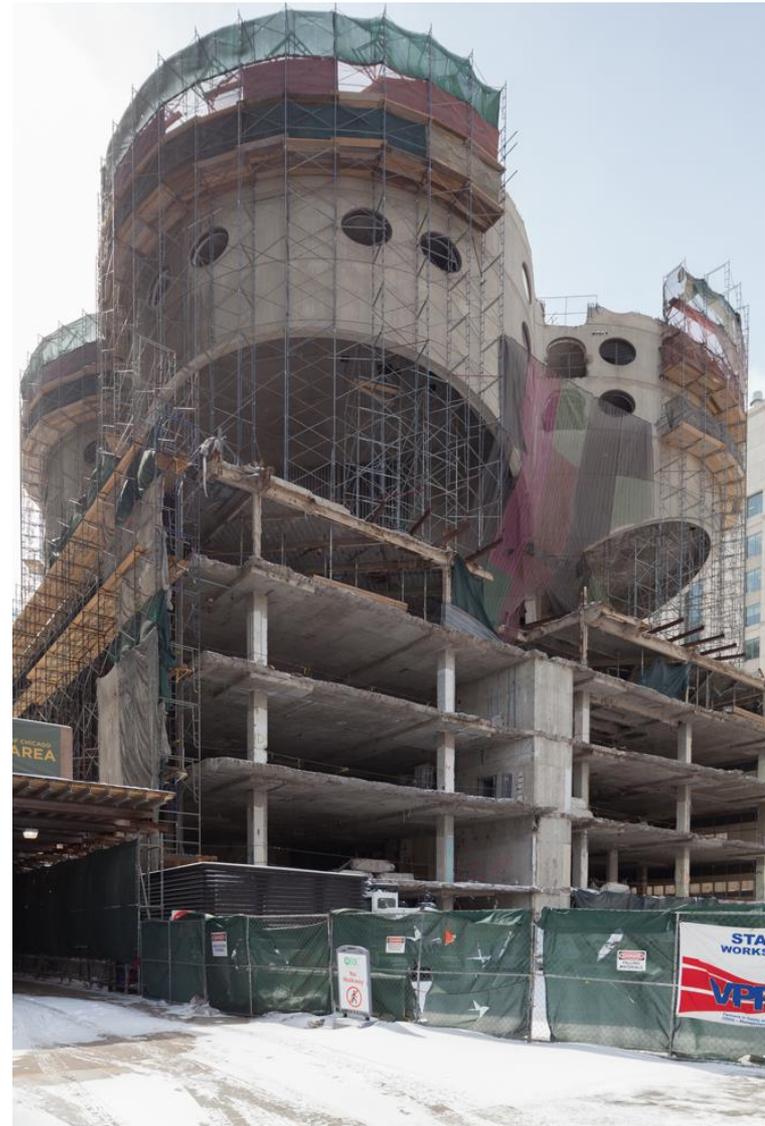
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PRESERVATION**

# **SIN #7**

**THOU SHALT NOT  
DESTROY HISTORY**

# IT'S TOO LATE

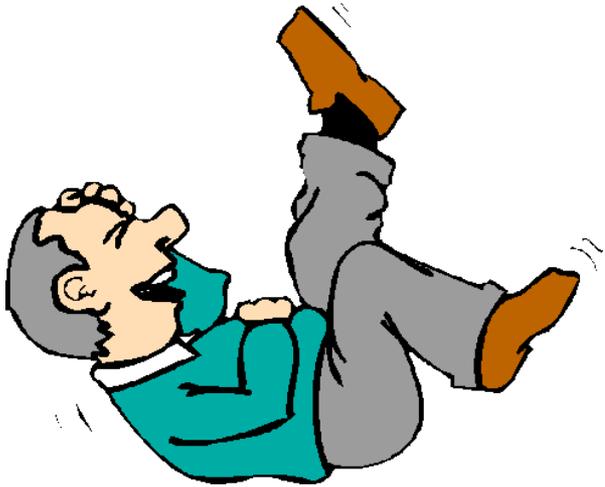




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# PRESERVATION NOT TOP 10



10



9



before



after





7



7



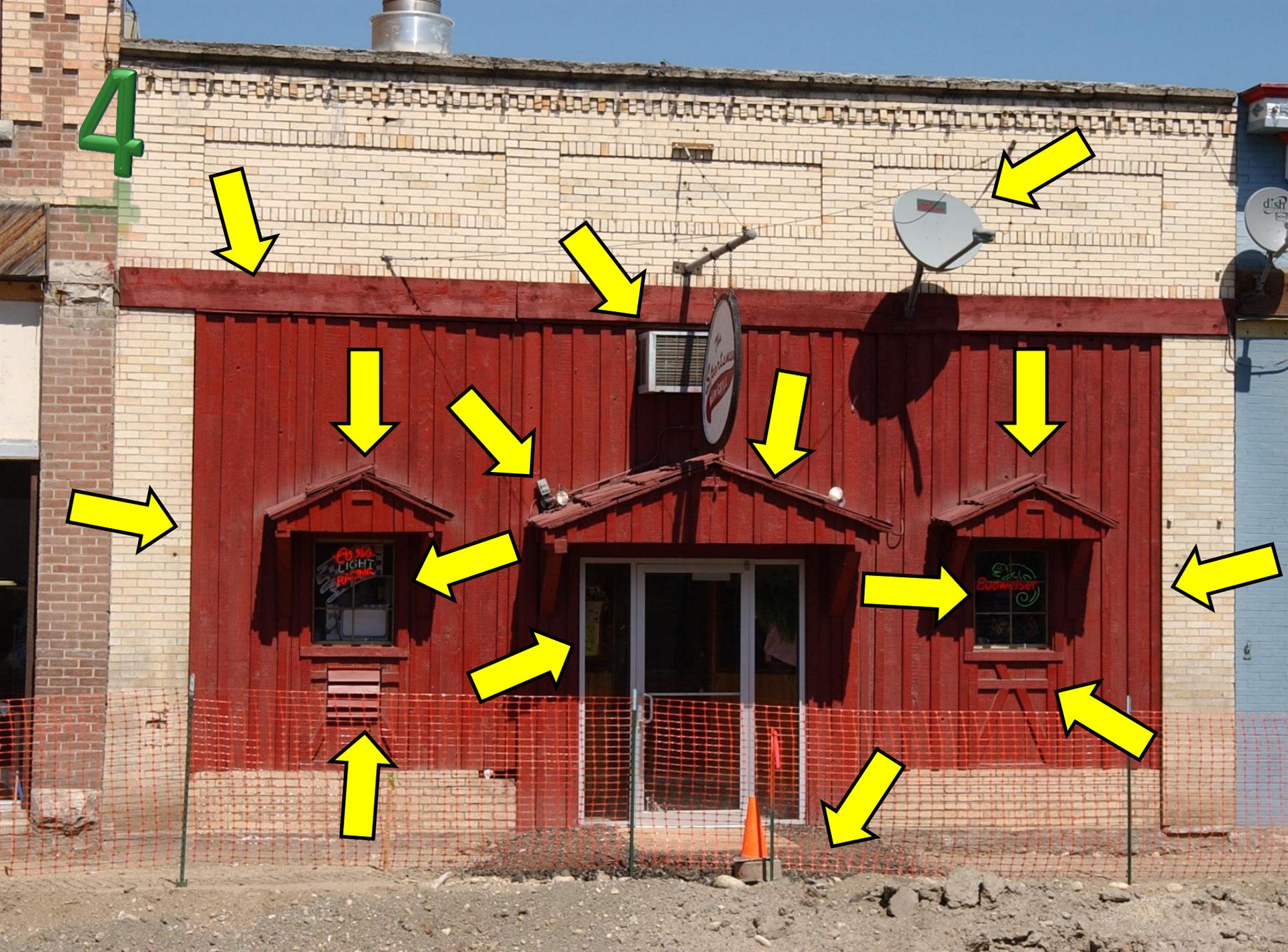
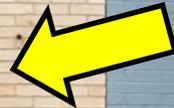
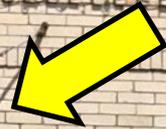
6



5



4



3



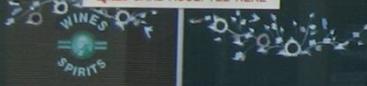
2



LIQUOR STORE

CONVENIENCE  
FOODS,  
GIFTS & MORE

QUEST CARD ACCEPTED HERE



POP · TOBACCO · GIFTS MIXERS · JUICE · BEER

45895

45897

BUD LIGHT

CLOSED

Secret Garden  
Styling Salon  
883-8880

45899



2A

# CONCRETE THEATRE

JOHN CARTER APRIL 6-8  
ENCORE FITNESS HERE

WWW.CONCRETE-THEATRE.COM 360-941-0403



2B  
7B



BANK

Columbia Valley Bank  
Serving the  
Columbia Valley  
Since 1892

45872

Concrete  
DENTAL

DO NOT  
ENTER

801-5195

DAVE'S TIMING  
CONCRETE, WA  
360-853-7433

1



MRS HOTEL WILSON INC, CENTRALIA WASH,  
STRICTLY MODERN AND FIREPROOF ONE BLOCK FROM UNION STATION.



1



# THANKS FOR COMING!

DAHP Website: [www.dahp.wa.gov](http://www.dahp.wa.gov)



**Michael Houser**, State Architectural Historian

DEPARTMENT OF ARCHAEOLOGY AND HISTORIC PRESERVATION

(360) 586-3076

[michael.houser@dahp.wa.gov](mailto:michael.houser@dahp.wa.gov)

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